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Possibility of Observing Neutral Currents in Neutrino Experiments. S. S. Gershteĭn, Nguyen Van Hieu, and R. A. Éramzhyan — 1097L.

ERRATA

Vol	No	Author	page	Correction
15	6	Turov	1098	The article contains an erroneous statement that weak ferromagnetism cannot exist in any cubic crystal (with collinear or weakly noncollinear antiferromagnetic structure. This was found to be true only for crystal classes T and T_h, and for others weak ferromagnetism will appear in antiferromagnets with magnetic structure type $3^+ 4^-$, and only due to invariants of third and higher orders in the antiferromagnetism vector L. Consequently a line (14) should be added to the table on p. 1100: $$14 \mid 207\text{-}230 \mid \text{Cubic} \mid 3^+, 4^- \mid M_x L_x (L_y^2 - L_z^2) + M_y L_y (L_z^2 - L_x^2) + M_z L_z (L_x^2 - L_y^2) \mid \text{VI}$$ The Cartesian axes are directed here parallel to the fourfold symmetry axes. The tensors $g^{(1)}$ and $g^{(2)}$ for this (sixth) group of weakly ferromagnetic structures will be identically equal and isotropic: $$g^{(1)}_{\alpha\beta} = g^{(2)}_{\alpha\beta} = g\delta_{\alpha\beta}$$
16	1	Valuev	172	At the end of the article there are incorrect expressions pertaining to $K\mu_3$ decay. The correct formula can be easily obtained from the main formula of the article by putting $g_S = g_T = 0$. The tangent of the angle between the $\overline{\mid m \mid^2}$ curve and the cos θ axis will be $\approx \beta_e$ if $g_{V2}/g_{V1} = -0.5$ and ≈ 0 if $g_{V2}/g_{V1} = 4.5$ and $\beta_e \sim 1$, so that in fact the difference in the angle correlations between these cases is even somewhat stronger than indicated in the article.
16	1	Zhdanov et al	246	The horizontal parts of curves 2 and 3 in Fig. 2 should be drawn with solid lines (they correspond to the asymptotic calculated values of the ionization losses, i.e., to the region in which the theory describes the relation between g/g_0 and the particle energy exactly).
16	1	Deutsch	478 & 481	When account is taken of thermoelectric processes it is necessary to add in the first curly bracket of (24) the term $$A = 3v_0^2 H_y c (\alpha_{xz} - \alpha_{zx})/2$$ and in Eq. (31) the term A/9.
16	1	Nguyen	920 Eqs. (4), (6), (7), & (8)	The combinations $V^1 \pm V^2$, $A^1 \pm A^2$, and $I^1 \pm I^2$ should be divided by $\sqrt{2}$.
16	1	Gershtein et al	1097 Eq. (1)	Reads $G/\sqrt{2}$, should read G/2
16	5	Gurevich		An error has crept into Eq. (30). The right half of this formula is actually equal to $$\epsilon_E \frac{\delta_{kz}}{2\pi E} \left[F_0(\varepsilon) + 2\varepsilon \frac{d}{d\varepsilon} F_0(\varepsilon) \right].$$

16 5 Gurevich (cont.)

As a result, the corrected equation (33) assumes the form

$$\left(1+\frac{\varepsilon T}{\varepsilon_E^2}\right)\frac{dx^k}{d\varepsilon}\frac{\varepsilon}{\varepsilon_E^2}x^k=-\frac{\delta_{kz}}{2\pi E\varepsilon}\int_0^\infty\left[F_0(\eta)+2\eta\frac{d}{d\eta}F_0(\eta)\right]d\eta. \qquad (33)$$

Suitable corrections must be made in (34) and (35) by replacing $\exp(-\zeta^2/2\varepsilon_E^2)$ by $(1-2\zeta^2/\varepsilon_E^2)\exp(-\zeta^2/2\varepsilon_E^2)$. As a result, relations (36) and (38), which determine the numerical constants x_0 and D, assume the form

$$\int_0^\infty dx x^{1/2}e^{-x^2}\int_{x_0}^x\frac{dy}{y}\int_y^\infty dz\,(1-4z^2)\,e^{-z^2}=0, \qquad (36)$$

$$D=2\int_0^\infty e^{-x^2}\int_{x_0}^x\frac{dy}{y}e^{y^2}\int_y^\infty dz e^{-z^2}(1-4z^2). \qquad (38)$$